
140-F Dry-Cleaning Solvent

A RECORDED VOLUNTARY STANDARD OF THE TRADE

COMMODITY STANDARDS

Simplified Practice Recommendations and Commercial Standards are developed by manufacturers, distributors, and users in cooperation with the Commodity Standards Division of the Office of Industry and Commerce, Bureau of Foreign and Domestic Commerce, and with the National Bureau of Standards.

The purpose of Simplified Practice Recommendations is to eliminate avoidable waste through the establishment of standards of practice for stock sizes and varieties of specific commodities that currently are in general production and demand. The purpose of Commercial Standards is to establish standard methods of test, rating, certification, and labeling of commodities, and to provide uniform bases for fair competition.

The adoption and use of a Simplified Practice Recommendation or a Commercial Standard is voluntary. However, when reference to a Commercial Standard is made in contracts, labels, invoices, or advertising literature, the provisions of the standard are enforceable through usual legal channels as a part of the sales contract.

A Simplified Practice Recommendation or a Commercial Standard originates with the proponent industry. The sponsors may be manufacturers, distributors, or users of the specific product. One of these three elements of industry submits to the Commodity Standards Division the necessary data to be used as the basis for developing a standard of practice. The Division, by means of assembled conferences or letter referenda, or both, assists the sponsor group in arriving at a tentative standard of practice and thereafter refers it to the other elements of the same industry for approval or for constructive criticism that will be helpful in making any necessary adjustments. The regular procedure of the Division assures continuous servicing of each effective Simplified Practice Recommendation and Commercial Standard, through review and revision, whenever, in the opinion of the industry, changing conditions warrant such action. Simplified Practice Recommendations and Commercial Standards are printed and made available by the Department of Commerce through the Government Printing Office and the Department of Commerce field offices.

UNITED STATES DEPARTMENT OF COMMERCE

Charles Sawyer, Secretary



U. S. DEPARTMENT OF COMMERCE

CHARLES SAWYER, Secretary

BUREAU OF FOREIGN AND DOMESTIC
COMMERCE

Office of Industry and Commerce
H. B. McCoy, Director

IN COOPERATION WITH
NATIONAL BUREAU OF STANDARDS
A. V. ASTIN, ACTING DIRECTOR

140-F Dry-Cleaning Solvent

[Effective April 1, 1951]

1. PURPOSE

1.1 The purpose of this commercial standard is to provide a specification for the guidance of producers, distributors, and users of dry-cleaning solvent known as "140-F solvent," and to provide a basis for certification of quality.

2. SCOPE

2.1 This standard covers physical and chemical properties, methods of testing, and identification of a grade of petroleum distillate referred to in the dry-cleaning industry as "140-F solvent."

3. GENERAL REQUIREMENTS

3.1 *Material*.—140-F solvent shall be a petroleum distillate conforming to the requirements given herein.

3.2 *Safety*.—The solvent shall be among those listed by the Underwriters' Laboratories, Inc., for use in class III dry-cleaning systems; or shall be certified by the refiner to meet the requirements of the Underwriters' Laboratories, Inc., for such solvents.

3.3 *Appearance* shall be clear and free from suspended matter and undissolved water.

3.4 *Color* shall be water-white or not darker than 21 by Saybolt chromometer. (Saybolt color 21 is the equivalent of a freshly prepared solution of potassium bichromate in distilled water, containing 0.0048 g of $K_2Cr_2O_7$ per liter.)

3.5 *Odor*.—Solvent shall be free from rancid and objectionable odors; shall be typical of a "sweet" naphtha.¹

3.6 *Corrosive properties*.—A clean copper strip shall show not more than extremely slight discoloration when submerged in the solvent for 3 hours at 212° F. (See par. 4.7.)

3.7 *Doctor test*.—A negative result shall be obtained by testing according to paragraph 4.8.

3.8 *Sulfuric acid absorption test*.—Not more than 5 percent of the solvent shall be absorbed by concentrated cp sulfuric acid (93.2 ± 0.3 percent concentration by titration) when tested in accordance with paragraph 4.9.

3.9 *Flash point*.—The flash point shall be not lower than 138° F, when tested in accordance with paragraph 4.10.

3.10 *Distillation*.

¹ Where the odor of the solvent is questionable, or in cases of dispute, the odor shall be tested according to paragraph 4.6. A cotton rag treated with the solvent according to paragraph 4.6 shall not retain any odor foreign to the cloth.

3.10.1 *Distillation range*.—When a sample is distilled in accordance with paragraph 4.11, the initial boiling point shall be not lower than 358° F; and not less than 50 percent shall be recovered when the thermometer reads 385° F, and not less than 90 percent when the thermometer reads 405° F. The end point (maximum distillation temperature) shall be not higher than 415° F.

3.10.2 *Residue*.—When a sample is distilled in accordance with paragraph 4.11, the residue shall be not more than 1.5 percent.

3.11 *Acidity*.—The residue remaining in the flask after the distillation is completed shall not show an acid reaction to methyl orange when tested in accordance with paragraph 4.12.

3.12 *Nonvolatile residue*.—The residue from evaporation shall not exceed 0.020 g per 100 ml when tested according to paragraph 4.13.

4. METHODS OF SAMPLING, INSPECTION, AND TESTING

4.1 *Detection and removal of separated water*.—Draw a portion of the solvent by means of a glass or metal container with a removable stopper or top, or with a “thief,” from the lowest part of the container, or by opening the bottom valve of the perfectly level tank car. If water is found to be present, draw it all out, record the quantity, and deduct it from the total volume of liquid delivered.

4.2 *Sampling*.—The method of sampling given under paragraph 4.2.1 shall be used whenever feasible. When this method is not applicable, the method given in paragraph 4.2.2, 4.2.3, or 4.2.4 is to be used, according to the special conditions that obtain.

4.2.1 *Sampling while loading tank car or while filling containers for shipment*.—Samples shall be drawn by the purchaser's inspector at the discharge pipe where it enters the receiving vessel or vessels. The composite sample shall be not less than 5 gallons and shall consist of small portions of not more than 1 quart each taken at regular intervals during the entire period of loading or filling. The composite sample thus obtained shall be thoroughly mixed, and from it three samples of not less than 1 quart each shall be placed in clean, dry, glass bottles or tin cans, which must be nearly filled with the sample and securely stoppered with new, clean corks or well-fitting covers or caps. These shall be sealed and distinctly labeled by the inspector; one shall be delivered to the buyer, one to the seller, and the third held for check in case of dispute.

4.2.2 *Sampling from loaded tank car or other large vessel*.—A composite sample of not less than 5 gallons shall be made up of numerous small samples of not more than 1 quart each taken from the top, bottom, and intermediate points by means of a metal or glass container with removable stopper or top. This device, attached to a suitable pole, is lowered to the various desired depths, when the stopper or top is removed and the container allowed to fill. The sample thus obtained is handled as in paragraph 4.2.1.

4.2.3 *Sampling from barrels and drums*.—Barrels and drums shall be sampled after gaging contents. Five percent of the packages in any shipment or delivery shall be represented in the sample. Thoroughly mix the contents of each barrel to be sampled by stirring with a clean rod and withdraw a portion from the center by means of a “thief” or other sampling device. The composite sample thus obtained shall be not less than 3 quarts, shall consist of equal portions of not less than 1/2 pint from each package sampled, and shall be handled

as in paragraph 4.2.1. Should the inspector suspect adulteration, he shall draw the samples from the suspected packages.

4.2.4 *Sampling from small containers, cans, etc., of 10 gallons or less.*—These should be sampled, while filling, by method given in paragraph 4.2.1 whenever possible, but in case this is impossible, the composite sample taken shall be not less than 3 quarts. This shall be drawn from at least five packages (from all when fewer), and in no case from less than 2 percent of the packages. The composite sample thus taken shall be thoroughly mixed and subdivided as in paragraph 4.2.1.

4.3 *Appearance.*—Examine to determine compliance with paragraph 3.3.

4.4 *Color.*—Color shall be determined by the Saybolt chromometer, ASTM² method D 156-49, or Federal Specification VV-L-791d, method 10.1.4.

4.5 *Odor.*—Determine whether or not the odor conforms to requirements of paragraph 3.5.

4.6 *Residual odor.*—Desized and laundered bleached cotton cloth of 3.6 to 4.0 ounces per square yard shall be used for this test. The cloth when lightly steamed shall have no odor except that of clean cotton cloth. The cloth shall be conditioned at 50 to 80 percent relative humidity and 65° to 90° F. A piece of the conditioned cloth approximately 12 inches square shall be placed in 100 ml of the solvent so as to be completely submerged, and allowed to soak for 5 minutes. The cloth shall then be removed, drained, but not squeezed or extracted, and hung at room temperature for 2 hours. The cloth shall then be dried in a stream of fresh air heated to 140° to 160° F (60° to 71° C) for 1 hour (similar to conditions in a drying cabinet or tumbler). The odor of the dried cloth, when steamed over boiling water for 4 to 5 seconds, shall be no different from that of an untreated sample similarly steamed.³

4.7 *Corrosion test.*—Perform according to Federal Specification VV-L-791d, method 530.3.2, or A. S. T. M. method D 484-40, paragraph 4b.

4.8 *Doctor test.*

4.8.1 *Sodium plumbite (doctor solution).*—Dissolve approximately 125 g of sodium hydroxide (NaOH) in 1 liter of distilled water. Add 60 g of litharge (PbO) and shake vigorously for 15 minutes or let stand, with occasional shakings, for at least a day. Allow to settle, and decant or siphon off the clear liquid. Filtration through a mat of asbestos may be employed if the solution does not settle clear. The solution should be kept in a tightly corked bottle and should be re-filtered before use if not perfectly clear.

4.8.2 *Procedure.*—Shake vigorously together in a test tube 10 ml of the sample to be tested and 5 ml of sodium plumbite solution for about 15 seconds. Add a small pinch of pure, dry flowers of sulfur, again shake for 15 seconds, and allow to settle. Observe within a 2-minute period. The quantity of sulfur used should be such that practically all of it floats on the interface between the sample and the sodium plumbite solution.

² American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pa.

³ The steaming of the swatches is necessary in order to slightly dampen and warm the fabric to bring out odors which might not otherwise be detectable but would be noticeable in a garment under the conditions of temperature and humidity encountered during normal wear.

4.8.3 *Interpretation of results.*—If the sample is discolored, or if the yellow color of the sulfur film is noticeably masked, the test shall be reported as positive and the sample condemned as “sour.” If the sample remains unchanged in color, and if the sulfur film is bright yellow or only slightly discolored with gray or flecked with black, the test shall be reported negative and the sample considered “sweet.”

4.9 *Sulfuric acid absorption.*

4.9.1 *Apparatus.*—One modified Babcock bottle with ground-glass stopper, graduated to 0.2 ml (see fig. 1) ; one 50-ml graduated cylinder; and one 10-ml pipette standardized to agree with stoppered Babcock bottle specified above.

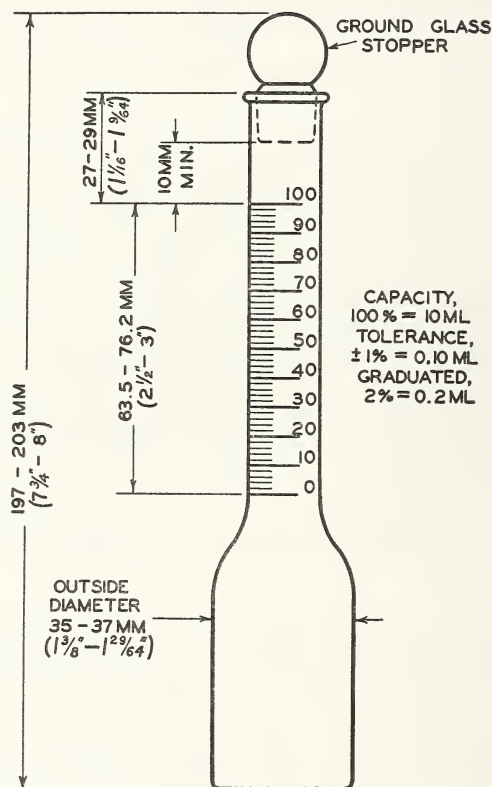


FIGURE 1. *Modified Babcock bottle for unsaturation tests.*

4.9.2 *Babcock bottle.*—The total height of the bottle, including stopper, shall be 7 3/4 to 8 inches (18.7 to 20.3 cm). The bulb shall have an outside diameter of between 35 and 37 mm. The graduated portion of the neck shall have a length of 2 1/2 to 3 inches (63.5 to 76.2 mm). The total percent graduation shall be 100, subdivided to 2 percent. Each 10-percent line shall be longer than the 2 percent, and shall be numbered, placing the numbers at the right of the scale. The capacity of the neck for each whole percent shall be 0.10 ml. The maximum error of the total graduation or any part thereof shall not exceed one-half the volume of the least graduation (1 percent, or 0.10 ml).

The 100-percent mark shall be 28 ± 1 mm from the top of the neck. The neck shall be provided with an accurately ground glass stopper. The distance between bottom of the stopper and the uppermost graduation shall be not less than 10 mm. The stopper and bottle shall bear a corresponding serial number.

4.9.3 Procedure.—Bring the temperature of the sample to $20^\circ \pm 1^\circ$ C. Measure out 10 ml of the sample into the clean, dry, modified Babcock bottle with the standard pipette and cool in ice water for 5 minutes. Add from a graduate 20 ml of cp sulfuric acid (93.2 ± 0.3 percent concentration, by titration), previously cooled in ice water for 5 minutes. The acid should be poured down the side of the bottle to prevent splashing. Again cool by allowing the bottle to stand in ice water for 10 minutes, so that the water level is above the level of the sample in the bottle. Remove the Babcock bottle from the water bath, place glass stopper, previously wet with sulfuric acid, in bottle and shake it violently for 60 ± 5 seconds. Carefully add to the bottle sufficient sulfuric acid to bring the upper liquid level almost to the top graduation, and allow the stoppered bottle to stand overnight (at least 12 hours is necessary). (Alternate method: A centrifuge may be used when it is desired to avoid the loss of time required for standing overnight.) Place the bottle in a water bath at $20^\circ \pm 1^\circ$ C for 15 minutes. Add sulfuric acid, previously brought to the temperature of 20° C, to bring the liquid level exactly to the top graduation. Read the scale at the lower surface of the solvent and report as percentage absorbed in sulfuric acid.

4.10 Flash point.—Determine according to A. S. T. M. Designation D 56-36 or Federal Specification VV-L-791d, method 110.1.3.

4.11 Distillation.—Carry out according to A. S. T. M. Designation D86-46 or Federal Specification VV-L-791d, method 100.1.6.

4.12 Acidity.—This test shall be made immediately after recording the volume of residue. Transfer the cooled residue to a test tube, add three volumes of distilled water, and shake the tube thoroughly. Allow the mixture to separate and remove the aqueous layer to a clean test tube by means of a pipette. Add one drop of a 0.1-percent solution of methyl orange. No pink or red color shall be formed.

4.13 Nonvolatile residue.—Transfer 100 ml of the solvent, measured in a 100-ml graduated cylinder, to a clean, tared 90 ± 5 mm diameter porcelain evaporating dish weighing no more than 80 g. Evaporate practically to dryness on a steam bath. Heat the dish and residue in a drying oven at $105^\circ \pm 2.5^\circ$ C to constant weight, cool in a desiccator, and weigh on an analytical balance.

5. LABELING

5.1 In order that the purchaser of 140-F dry-cleaning solvent may be assured that the product complies with this commercial standard, it is recommended that the following statement be included in labels, contracts, sales literature, invoices, etc.:

This 140-F dry-cleaning solvent complies with all requirements of Commercial Standard CS174-51, as developed by the trade under the procedure of the Commodity Standards Division, and issued by the U. S. Department of Commerce.

6. EFFECTIVE DATE

6.1 Having been passed through the regular procedure of the Commodity Standards Division, and approved by the acceptors herein-after listed, this commercial standard was issued by the United States Department of Commerce, effective from April 1, 1951.

EDWIN W. ELY,

Chief, Commodity Standards Division.

HISTORY OF PROJECT

On May 23, 1949, the National Institute of Cleaning & Dyeing requested the cooperation of the National Bureau of Standards in the establishment of a commercial standard for 140-F dry-cleaning solvent.

Following receipt of this request by the Bureau, copies of a proposed commercial standard for 140-F dry-cleaning solvent, endorsed by the proponent association, were circulated to selected representatives of manufacturers, distributors, purchasers, testing laboratories, and Government agencies for advance comment. The specification was adjusted in accordance with majority viewpoint as indicated by the comments.

With the unqualified endorsement of a number of interested organizations, the recommended commercial standard was submitted to the trade for written acceptance on June 26, 1950. Having received acceptances in writing estimated to represent a satisfactory majority, an announcement was issued on March 1, 1951, that the standard would become effective for new production on April 1, 1951.

Project Manager: F. W. Reynolds, Commodity Standards Division, Office of Industry and Commerce.

Technical Adviser: Dr. Frank L. Howard, Heat and Power Division, National Bureau of Standards.

STANDING COMMITTEE

The following individuals comprise the membership of the standing committee, which is to review, prior to circulation for acceptance, revisions proposed to keep the standard abreast of progress. Comment concerning the standard and suggestions for revision may be addressed to any member of the committee or to the Commodity Standards Division, Office of Industry and Commerce, United States Department of Commerce, which acts as secretary for the committee.

DR. J. C. ALEXANDER, National Institute of Cleaning & Dyeing, Silver Spring, Md. (Chairman.)

H. S. KELLY, Socony-Vacuum Oil Co., 26 Broadway, New York, N. Y.

C. H. DRESSER, Anderson-Prichard Oil Corp., Oklahoma City 2, Okla.

F. PREU, Shell Oil Co., 50 West 50th St., New York, N. Y.

EDWARD A. CRESWICK, American Laundry Machinery Co., Cincinnati 12, Ohio.

DR. E. R. CLARK, United States Hoffman Machinery Corp., 219 Lamson St., Syracuse, N. Y.

JOHN H. HORST, Lord Baltimore Service, Inc., 3710 East Baltimore St., Baltimore, Md.

R. H. PLEDGER, Manhattan Co., 1328 Florida Avenue NW., Washington, D. C.

GEORGE P. BERGMANN, Bergmann's, Inc., 623 G St. NW., Washington, D. C.

ACCEPTANCE OF COMMERCIAL STANDARD

If acceptance has not previously been filed, this sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date _____

Commodity Standards Division,
Office of Industry and Commerce,
U. S. Department of Commerce,
Washington 25, D. C.

Gentlemen :

We believe that the Commercial Standard 174-51 constitutes a useful standard of practice, and we individually plan to utilize it as far as practicable in the

production¹ distribution¹ purchase¹ testing¹
of 140-F dry-cleaning solvent. We reserve the right to depart from it as we deem advisable.

We understand, of course, that only those articles which actually comply with the standard in all respects can be identified or labeled as conforming thereto.

Signature of authorized officer _____
(In ink)

(Kindly typewrite or print the following lines)

Name and title of above officer _____

Organization _____
(Fill in exactly as it should be listed)

Street address _____

City, zone, and State _____

¹ Underscore which one. Please see that separate acceptances are filed for all subsidiary companies and affiliates which should be listed separately as acceptors. In the case of related interests, trade associations, trade papers, etc., desiring to record their general support, the words "General Support" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of those concerned. They represent a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but since they represent the will of the interested groups as a whole, their provisions through usage soon become established as trade customs, and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard, where practicable, in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold; first, to act as an unbiased coordinator to bring all interested parties together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by a satisfactory majority of production or consumption in the absence of active valid opposition, the success of the project is announced. If, however, in the opinion of the standing committee or of the Department of Commerce the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

The organizations listed below have individually accepted this standard for use as far as practicable in the production, distribution, testing, or purchase of 140-F dry-cleaning solvent. In accepting the standard they reserved the right to depart therefrom as they individually deem advisable. It is expected that products which actually comply with the requirements of this standard in all respects will be regularly identified or labeled as conforming thereto, and that purchasers will require such specific evidence of conformity.

ASSOCIATIONS

(General Support)

National Institute of Cleaning & Dyeing, Silver Spring, Md. Pennsylvania Association of Dyers & Cleaners, Harrisburg, Pa.

FIRMS AND OTHER INTERESTS

"A" Cleaners & Dyers, Houston, Tex.
 Acme Cleaners & Dyers, Muskegon, Mich.
 Adams the Cleaner, Bushnell, Ill.
 Adco, Inc., Sedalia, Mo.
 Airline Manufacturing Co., St. Louis, Mo.
 Akron Cleaners, Inc., Seattle, Wash.
 Aldredge Cleaners & Tailors, Gilmer, Tex.
 Allen and Vickers, Inc., Atlanta, Ga.
 Allen's Cleaners, Rockville, Conn.
 Allied Analytical & Research Laboratories, Dallas, Tex.
 All-In-One Manufacturing & Supply Co., Houston, Tex.
 American Cleaners & Dyers, Evansville, Ind.
 American Ideal Cleaning Co., Chicago, Ill.*
 American Laundry & Cleaners, Grand Rapids, Mich.
 American Laundry & Cleaning Co., Lafayette, Ind.
 American Laundry & Dry Cleaning, Joplin, Mo.
 American Machine & Metals Inc., East Moline, Ill.*
 American Mineral Spirits Co., New York, N. Y.
 American Mothproofing Co., St. Louis, Mo.
 Anderson-Prichard Oil Corp., Oklahoma City, Okla.
 Ansell Laboratories, Ltd., Vernon, B. C., Canada.
 Arizona Testing Laboratories, Phoenix, Ariz.
 Arrow Cleaners, Jacksonville, Fla.*
 Art Cleaners, San Jose, Calif.*
 Artistic Cleaners, Dubuque, Iowa.
 Artistic Cleaners—Hatter, Clinton, Okla.
 Artistic Cleaners, Inc., East Gary, Ind.
 Associated Service Corp., Indianapolis, Ind.
 Atwoods, Geneseo, Ill.
 Balto Dry Cleaners, Upper Montclair, N. J.
 Baker Cleaning Co., Tarrant, Ala.*
 Balford, Inc., State College, Pa.
 Band Box Cleaners, Inc., Vassar, Mich.*
 Banner Dyers & Cleaners, Inc., Clayton, Mo.
 Banning Cleaners, Rochelle, Ill.
 Barrow-Agee Laboratories, Inc., Memphis, Tenn.
 Barth Cleaners, Brighton, Colo.
 Beacon Laundry & Cleaning, Culver City, Calif.
 Beckert Dye & Cleaning Plant, Inc., Atlantic City, N. J.
 Beilstein Co., The, Sandusky, Ohio.*
 Bel-Aire Cleaners, Pittsburgh, Pa.
 Bell's Dry Cleaners, Gainesville, Ga.*
 Berry Bros. & Donohue, Inc., Fort Worth, Tex.*
 Best Laundry & Cleaners, Lincoln, Nebr.
 Bishop Laundry Co., Rocky Mount, N. C.
 Bishop Laundry & Dry Cleaners, Dothan, Ala.*
 Bishop's Sanitary Cleaning Co., Fostoria, Ohio.*
 Black & White Cleaners, Inc., New York, N. Y.
 Blanchard's Cleaners & Storage Co., Kansas City, Kans.

Blue & White Cleaners, Hillsdale, Mich.*
 Bonham's Dry Cleaners, Denver, Colo.*
 Bonny Brite Dry Cleaners, Clinton, Iowa*
 Bookman-South End Cleaners—Furriers, Toledo, Ohio.
 Braff Tailors & Cleaners, Greenfield, Mass.*
 Briarcliff Laundry, Inc., Briarcliff Manor, N. Y.
 Brightwood Cleaners, Indianapolis, Ind.*
 Brison's Curtain Cleanery, Reading, Pa.
 Broadway Laundry Co., St. Louis, Mo.
 Brode Dry Cleaning Co., Akron, Ohio.*
 Brodhacker Cleaners, Gideon, Mo.*
 Brown, R. J., Co., The, St. Louis, Mo.
 Burkhardt's Laundry & Dye Works, Houston, Tex.*
 Buster & Walker, Cleaners & Hatters, Llano, Tex.*
 Butler Cleaners, Hamilton, Ohio.*
 Butler Manufacturing Co., Kansas City, Mo.
 Caled Products Co., Inc., Brentwood, Md.
 California Testing Laboratories, Inc., Los Angeles, Calif.
 Cambridge Cleaners, Cambridge, Md.*
 Camel City Laundry, Winston-Salem, N. C.*
 Camp Wood Tailor Shop, Camp Wood, Fort Monmouth, N. J.
 Campbell Cleaners, Campbell, Calif.*
 Campbell Cleaners, Charlotte, N. C.*
 Campus Cleaners, Manhattan, Kans.
 Cando Dry Cleaners, Cando, N. Dak.
 Careful Cleaners, Long Beach, Calif.*
 Carman & Co., Brooklyn, N. Y.*
 Caroline Laundry Inc., Morristown, N. J.
 Casper-Troy Laundry Co., Casper, Wyo.*
 Chambersburg Laundry—Sanitone Drycleaners, Chambersburg, Pa.
 Chapman & Graf, La Porte, Ind.
 Charlton Laboratories, Inc., Portland, Ore.
 Cheek Dry Cleaners, Durham, N. C.*
 Chetloe's, Yellow Springs, Ohio.*
 City Cleaners, Dickinson, N. Dak.*
 City Cleaners & Dyers, Newton, N. J.*
 City Dye Works, Lewiston, Idaho.*
 City-Elite Laundry Co., Denver, Colo.
 City Laundry & Dry Cleaners, Tucson, Ariz.
 City Master Cleaners, Guthrie, Okla.
 Clarks Laundry & Dry Cleaning Co., Mishawaka, Ind.*
 Cleaner Sales & Equipment Corp., New York, N. Y.*
 Clinton Cleaners, Albany, Ky.
 Clinton Laundry & Dry Cleaners, Clinton, Okla.*
 Coal City Cleaner & Dyers, Coal City, Ill.
 College Cleaners, Chickasha, Okla.*
 College Cleaners & Dyers, Corvallis, Ore.*
 Colonial Cleaners, Hampton, Va.*
 Columbia Cleaners, Quincy, Ill.
 Columbia Laundry & Cleaners, Key West, Fla.
 Columbian Laundry, Newark, N. J.
 Community Laundry & Drycleaners, Kansas City, Mo.
 Conwell, E. L., & Co., Philadelphia, Pa.
 Cooper's Dry Cleaning, Uhrichsville, Ohio.*
 Copper Range Laundry, Houghton, Mich.

Cosden Petroleum Corp., Big Spring, Tex.
 Country Club, Inc., Warren, R. I.
 Cramer's Master Dry Cleaners, Inc., Elgin, Ill.
 Creed, The Cleaner, Struthers, Ohio.*
 Cross Cleaners, Leon, Iowa.
 Crown Laundry & Dry Cleaning Co., Indianapolis, Ind.
 Crystal Cleaners, Oskaloosa, Iowa.*
 Cusack Laundry—Dry Cleaners, Sioux City, Iowa.
 Davis, Cy, Cleaners, North Vernon, Ind.
 Deep Rock Oil Corp., Tulsa, Okla.
 Dells Fine Cleaning, Janesville, Wis.*
 De Luxe Cleaners, Birmingham, Ala.
 De Luxe Cleaners, Mentone, Ind.*
 Demaree, A. C., Inc., Indianapolis, Ind.*
 Despatch Laundry & Dry Cleaners, Inc., Phoenix, Ariz.
 Dion Cleansers, Inc., Nashua, N. H.
 District Heights Cleaners, District Heights, Md.
 Doak, Paul, Drycleaners, Eaton Rapids, Mich.
 Dr. Oberer Cleaning & Dye Works, Inc., Paterson, N. J.
 Dods, Art, Cleaners, Kansas City, Mo.
 Dollar Laundry & Cleaners, Topeka, Kans.*
 Domestic Laundry, Inc., Wichita, Kans.*
 Dorsey Cleaners, Cambridge, Nebr.
 Drake Petroleum Co., Chicago, Ill.
 Drive-In Cleaners, Missoula, Mont.*
 Drysol Corp., Norfolk, Va.
 DuBois Dry Cleaners, Stockton, Calif.
 Duleto, A. D., & Co., Inc., Bronxville, N. Y.
 Eclipse Laundry Co., Zanesville, Ohio.*
 Economy Cleaners & Dyers, Los Angeles, Calif.
 Edelweiss Cleaners, Delhi, N. Y.*
 Ekroth Laboratories, Inc., Brooklyn, N. Y.
 Elam Cleaners, Parsons, Kans.*
 El Dorado Refining Co., The, El Dorado, Kans.
 Elite Laundry Co., Baltimore, Md.
 Elizabeththton Steam Laundry, Elizabeththton, Tenn.
 Elkhart Cleaners & Furriers, Inc., Elkhart, Ind.
 Emling's Cleaners & Dyers, Erie, Pa.*
 Empire Cleaners, Hazleton, Pa.*
 Erickson Cleaning Service, Chicago, Ill.*
 Excelsior Laundry Co., The, Cincinnati, Ohio.*
 Excelsior Laundry & Dry Cleaning Co., Excelsior Springs, Mo.
 Fairground Cleaners—Launderers, Huntington Station, N. Y.
 Falls Avenue Cleaners, Waterloo, Iowa.
 Farley's Dry Cleaning, Athens, Ohio.*
 Fashion Cleaners, Parsons, Kans.*
 Fashion Dry Cleaners, Highland, Ind.*
 Fath Cleaners & Dyers, Lebanon, Pa.
 Fielder's DeLuxe Cleaners, Charlotte, Mich.
 Finch Cleaners & Dyers, Chardon, Ohio.*
 Fleming Bros., Cleaners, Hillsboro, Ill.
 Formal Cleaners, Bridgeport, Conn.*
 Four Lakes Cleaners, Madison, Wis.
 French Steam Dye Works, Inc., Muncie, Ind.*
 French Way Cleaners & Furriers, Des Moines, Iowa.*
 Fuller Cleaning & Dyeing Co., Cleveland, Ohio.*
 Gales Cleaners, Newton, Iowa.
 Garrison's Cleaners, Dothan, Ala.*
 Gerbron, Inc., Philadelphia, Pa.*
 Gibson's Cleaners & Dyers, Geneva, Ill.
 Globe Cleaners & Dyers, Sweetwater, Tex.
 Goller's Dry Cleaners, Fort Wayne, Ind.
 Great Lakes Carbon Corp., Dry Cleaning Division, New York, N. Y.*
 Greenville Steam Laundry, Greenville, Miss.*
 Groce Dry Cleaning, Maysville, Ky.*
 Habit Cleaners, The, Port Angeles, Wash.
 Hawaiian Oil & Refining Co., Houston, Tex.
 Hardman Master Cleaner, Tulsa, Okla.
 Harlow Drive-In Cleaners, San Carlos, Calif.
 Harry's Cleaners & Fur Storage, Okmulgee, Okla.*
 Hazel Park Cleaners, St. Paul, Minn.*
 Highland Cleaners, St. Paul, Minn.*
 Hollywood Cleaners, Lincoln, Nebr.*
 Horstman's Cleaners & Furriers, Carbon-dale, Ill.*
 Houston Laboratories, Houston, Tex.
 Hovey Laundry & Dry Cleaning Co., Worcester, Mass.*
 Howard Cleaners of Baltimore, Inc., Baltimore, Md.*
 Howard's Laundry & Cleaners, Little Rock, Ark.
 Huston Cleaners, Paducah, Ky.*
 Hutchinson Dry Cleaners, Hutchinson, Minn.
 Ideal Laundry Co., Milwaukee, Wis.
 Ideal Laundry & Dry Cleaners, Inc., Hutchinson, Kans.
 Ideal Laundry, Inc., The, Norfolk, Va.*
 Imperial Cleaners, Inc., Morgantown, W. Va.*
 Imperial Dry Cleaning Co., Kent, Ohio.
 Industrial Specialties Co., Kansas City, Mo.
 Inland Oil Co., Baltimore, Md.
 Inspected Dry Cleaning Corp., New York, N. Y.
 Interboro Laundry & Cleaners, Inc., Attleboro Falls, Mass.
 Jackson Laundry & Cleaning Co. (Inc.), Kansas City, Mo.*
 Jacobs Cleaners, Rock Island, Ill.
 Jasper Laundry & Dry Cleaners, Jasper, Ind.
 Jefferson Park Valet Shop, Chicago, Ill.*
 Jimmy's Dry Cleaners, Vero Beach, Fla.*
 Johns-Manville Sales Corp., New York, N. Y.*
 Johnson Launderers & Cleaners of Albert Lea, Inc., Albert Lea, Minn.
 Judkins Laundry, Inc., Lewiston, Maine.*
 Kallaway's Cleaners, Frederick, Md.*
 Kappelin Cleaners, Oregon, Ill.
 Karstadt Reed, Cleaner, Indianapolis, Ind.*
 Keily's Cleaning Centre, North Hollywood, Calif.
 Keystone Laundry & Dry Cleaners, Inc., Joplin, Mo.
 Kimball Laundry Co., Omaha, Nebr.
 King Stores of Bayonne, Bayonne, N. J.
 Kings Dry Cleaning, The, Cleveland, Ohio.*
 King's Laundry, Inc., Oshkosh, Wis.*
 Kirkland Cleaners, Sumter, S. C.*
 Klean-Rite Cleaners, Peoria, Ill.*
 Kramer, Bruce, Co., North Manchester, Ind.*
 Lachat Cleaners, Racine, Wis.
 Lafourcades Drycleaners, Lompoc, Calif.*
 La Jolla Dry Cleaners, La Jolla, Calif.*
 Lake County Cleaners, Lakeport, Calif.*
 Lake Side Dye Works, Milwaukee, Wis.
 La Salle Cleansers & Tailors, Malden, Mass.*
 Laucks Laboratories, Inc., Seattle, Wash.
 Lebanon Laundry & Dry Cleaners, Inc., Lebanon, N. H.*
 Lechtur's Cleaners, Inc., Winthrop, Mass.
 Lewistown Dry Cleaning & Laundry Co., Lewistown, Pa.
 Lightfoot, R. P., Co., Inc., Fort Worth, Tex.
 Linton Cleaners, Humeston, Iowa.*
 Lion Oil Co., El Dorado, Ark.
 Lohide's Country Cleaner, Fortuna, Calif.
 Lord Baltimore Service, Inc., Baltimore, Md.
 Lord Calvert Laundry & Dry Cleaners, Inc., Baltimore, Md.*
 Lorraine Cleaners, Rutherford, N. J.
 Los Angeles Soap Co., Los Angeles, Calif.*
 Magic Cleaners, Greenville, Miss.
 Magnus Model Laundry, Muscatine, Iowa.*
 Marion Dry Cleaners, Marion, N. C.*
 Master Dry Cleaners, Sparta, Wis.*
 McNally Cleaners & Furriers, Emmetsburg, Iowa.*
 Melody Cleaners, Oklahoma City, Okla.*
 Melody Laundry & Cleaners, Inc., Collinsville, Ill.
 Merced Laundry, Merced, Calif.
 Mercury Cleaners, Pawcatuck, Conn.
 Mercury Cleaners, Sacramento, Calif.

See footnote bottom p. 12.

Mertins French Cleaning Co., Chattanooga, Tenn.
 Milan Cleaners, Milan, Mo.*
 Miles City Steam Laundry Co., Miles City, Mont.
 Miller's Cleaning Works, Anderson, Ind.*
 Miller's, Paul, Staten Island, N. Y.*
 Mitchell Cleaners, Deland, Fla.
 Model Dry Cleaners, Belmond, Iowa.
 Model Star Laundry & Dry Cleaners, Danville, Ill.
 Modern Cleaners, Anburn, Maine.*
 Modern Cleaners, Bloomington, Ind.
 Modern Cleaners, Marquette, Mich.
 Modern Cleaners, McCook, Nebr.*
 Modern Cleaners, Mitchell, Nebr.
 Modern Dry Cleaners, Danville, Ill.
 Modern Dry Cleaners & Launderers, Cincinnati, Ohio.*
 Modern Rug Dry Cleaners, Danville, Ill.
 Monroe Steam Laundry, Monroe, La.*
 Moore's Inc., Elkhart, Ind.*
 Moreton Cleaners, Waverly, N. Y.*
 Morgan's Laundry & Cleaning, Inc., St. Louis, Mo.
 Morrell's Cleaners & Furriers, Bloomington, Ill.*
 Morris Cleaners, Uhrichsville, Ohio.*
 Morrison, M. J., Inc., Berlin, N. H.
 Morrow Cleaners, Quincy, Fla.
 Murray Cleaners, Fort Scott, Kans.*
 Vurray Cleaners, Neodesha, Kans.
 Myers Cleaners & Furriers, Delphos, Ohio.*
 National Cleaners, Inc., Seattle, Wash.*
 National Indemnity Exchange, St. Louis, Mo.
 National Testing Laboratories, Inc., Rochester, N. Y.
 Nauta's Dry Cleaners, Grand Haven, Mich.*
 New Castle Cleaners & Dyers, Chappaqua, N. Y.*
 New Cleaners, The, Ste. Genevieve, Mo.*
 New Jersey Cleaners, Washington, D. C.
 New Method Laundry Co., Atlanta, Ga.
 New Mexico Dry Cleaning Board, Albuquerque, N. Mex.
 New Process Laundry Co., Inc., Cedar Rapids, Iowa.*
 New Vogue Cleaners & Dyers, Inc., Roanoke, Va.*
 New York Cleaners, Oak Ridge, Tenn.*
 New York Testing Laboratories, Inc., New York, N. Y.
 Newberry Steam Laundry & Dry Cleaning Co., Newberry, S. C.*
 Nickey, Harry W., Cleaner, Springfield, Ill.
 Norfolk Testing Laboratories, Norfolk, Va.
 Normington's Inc., Stevens Point, Wis.*
 North Carolina Agricultural & Technical College, Greensboro, N. C.*
 North Dakota State Laboratories Department, Bismarck, N. Dak.
 North East Laundry, Le Roy, N. Y.*
 North English Cleaners, North English, Iowa.
 Nu-Way Cleaners, Corydon, Iowa.
 Nu-Way Cleaners, Olney, Ill.
 Nu-Way Cleaners & Hatters, Buffalo, N. Y.*
 Nu-Way Cleaners & Laundry, Marietta, Ga.
 O. K. Cleaners & Shirt Laundry, Port Gibson, Miss.*
 Oklahoma Testing Laboratories, Oklahoma City, Okla.
 Omaha Testing Laboratories, Omaha, Nebr.
 Orthmann Laboratories, Inc., The Milwaukee, Wis.
 P. & H. Drycleaners, North Norwich, N. Y.*
 Packham's Cleaners, Blackfoot, Idaho.*
 Paducah Laundry & Cleaners, Paducah, Ky.*
 Palace Launderers & Cleaners, Wilkes-Barre, Pa.
 Pantex Manufacturing Corp., Pawtucket, R. I.*
 Paramount Cleaners, Inc., Chattanooga, Tenn.
 Paramount Cleaners, Inc., St. Louis, Mo.
 Parisian Cleaners, Ponca City, Okla.*
 Parisian Cleaners, Inc., Lynn, Mass.*

Park Tailor & Cleaner, Manasquan, N. J.*
 Parkway Laundry Service, Inc., White Plains, N. Y.
 Patek & Co., San Francisco, Calif.*
 Patzig Testing Laboratories, Des Moines, Iowa.
 Peabody Dry Cleaning, Greenville, Pa.
 Peacock Cleaners, Inc., Greeley, Colo.*
 Peacock Laundry & Dry Cleaners, Topeka, Kans.*
 Pearson, Jack, Inc., Los Angeles, Calif.
 Pease Laboratories, Inc., New York, N. Y.
 Perfecto Cleaners, Houston, Tex.*
 Perry Super Cleaners, Utica, N. Y.*
 Perryman Cleaners, Jerrinton, Tex.*
 Peter Pan Cleaners, Great Bend, Kans.*
 Petri's Odorless Cleaners, Long Beach, Calif.*
 Petroleum Solvents Company of Pennsylvania, Butler, Pa.
 Phila. Dry Cleaners Inc., Pottstown, Pa.*
 Phillips Dry Cleaning Co., Columbus, Ga.*
 Pigman Bros. Cleaners, Whitesburg, Ky.*
 Pilgrim Laundry Co., Boston, Mass.*
 Pittsburgh Testing Laboratory, Pittsburgh, Pa.
 Pittsburgh Testing Laboratory, San Francisco, Calif.
 Plowman Cleaners & Furriers, Rapid City, S. Dak.
 Polytechnique Laboratories, Ozone Park, N. Y.
 Pompton Lakes Cleaning Co., Pompton Lakes, N. J.
 Portland Dry Cleaners, Portland, Mich.
 Powers Laundry & Cleaners, Huntington, W. Va.*
 Quaker City Laundry, Philadelphia, Pa.
 Quality Cleaners, Bryan, Tex.*
 Quality Cleaners, Pratt, Kans.*
 Quality Cleaners, Washington, Ind.
 Quality Dry Cleaning Co., Ogden, Utah.*
 Queen City Laundry & Cleaners, Inc., Hastings, Nebr.
 Quick Service Cleaners, Las Cruces, N. Mex.
 Rad-D-Ant Cleaners, Kennewick, Wash.*
 Rainbow Cleaners, Evansville, Ind.
 Ravekes Dry Cleaning & Tailoring Shop, Dobbs Ferry, N. Y.*
 Ravenna Cleaners, Seattle, Wash.*
 Read-Benzol Co., Akron, Ohio.*
 Real Cleaners & Furriers, Inc., St. Louis, Mo.
 Red Seal Cleaners, Indianapolis, Ind.*
 Reedley Steam Laundry & Dry Cleaning Works, Reedley, Calif.*
 Revelation Cleaning, Alameda, Calif.
 Rhine Cleaners, Baldwin, Kans.
 Rialto Cleaners & Hatters, Peoria, Ill.*
 Richmond Valetaria, Inc., Richmond, Va.
 Rinaldi & Sons, Custom Dry Cleaners, Washington, D. C.*
 Risley's Cleaners, Mount Carmel, Ill.*
 Rite-Way Cleaners Co., Grandville, Mich.
 Riteway Laundry Co., Inc., Brooklyn, N. Y.
 Roxie Cleaners & Laundry, Los Angeles, Calif.
 Rybiski's Inc., Lake Charles, La.*
 S & S Quality Cleaners, South Bend, Ind.*
 S & S Services, Inc., Romney, W. Va.*
 Salina Steam Laundry & Dry Cleaners, Salina, Kans.
 San Anselmo French Cleaners, San Anselmo, Calif.
 Sanitary Cleaners & Tailoring Co., Sterling, Colo.*
 Schlosser, B. L., Summit, N. J.*
 Select Cleaners Inc., Pittsburgh, Pa.*
 Service Cleaners, Craig, Colo.
 Service Cleaners, Park River, N. Dak.
 Service Cleaners, Stockton, Calif.*
 Sevier's, Bristol, Va.
 Shaffer Cleaners, Holdrege, Nebr.
 Shell Oil Co., New York, N. Y.
 Shepard Cleaners, Muskegon Heights, Mich.
 Shepherd Park Valet, Inc., Washington, D. C.

Shine Laundry & Cleaners, Washington, Ga.*
 Shorty, Cleaner, Tailor, Launderer, Stillwater, Minn.*
 Shreveport Laundries, Inc., Shreveport, La.
 Shull's Dry Cleaning Work, Inc., York, Pa.*
 Sierra Cleaners, Fresno, Calif.
 Smith Cleaners, The, Grayville, Ill.
 Smith Cleaners, Monroe, Wash.*
 Smock Cleaners, Sharon, Pa.*
 Snyder's Dry Cleaners, Woodstock, Va.*
 Socony-Vacuum Oil Co., Inc., New York, N. Y.
 South Grand Cleaners, St. Louis, Mo.
 South Haven Laundry, Inc., South Haven, Mich.*
 Southern Testing Laboratories, Inc., Birmingham, Ala.
 Spaeth Bros. Cleaners, Mason, Ohio.*
 Spotless Cleaners, Inc., Dunmore, Pa.*
 Stafford Cleaners, Merced, Calif.
 Standard Laundry & Cleaning Machinery Co., Dallas, Tex.
 Standard Oil Company of California, San Francisco, Calif.
 Star Cleaners & Launderers, Terre Haute, Ind.
 State Dry Cleaners Board, Oklahoma City, Okla.
 Staub & Son Inc., Rochester, N. Y.
 Stealey's Cleaning & Dyeing Works, Parkersburg, W. Va.*
 Stoll Oil Refining Co., Louisville, Ky.
 Stratford Cleaners & Dyers, Wheaton, Silver Spring, Md.
 Stuart Dry Cleaners Inc., Matewan, W. Va.
 Sunshine Cleaners, Bloomington, Ind.
 Sunshine Launderers & Dry Cleaners, Oshkosh, Wis.
 Sunshine Laundry Inc., High Point, N. C.*
 Superior Cleaners, Dodge City, Kans.
 Superior Cleaners, Greeley, Colo.*
 Superior Cleaners, Tulsa, Okla.*
 Superior Laundry Co., Charleston, W. Va.*
 Swift Service Inc., Mamaroneck, N. Y.*
 Swiss Cleaners, Opelika, Ala.*
 Tahlequah Laundry & Dry Cleaning, Tahlequah, Okla.
 Texas Testing Laboratories, Inc., Dallas, Tex.
 Textor Laboratories, The, Cleveland, Ohio.
 Thompson's Cleaners, Starkville, Miss.*
 Top Hat Cleaners & Dyers, Cleveland, Ohio.*
 Tower Laundry & Cleaners, Kansas City, Mo.
 Tri-County Oil & Chemical Corp., Pompton Lakes, N. J.
 Tri-District Cleaners, Northfork, W. Va.*
 Triplex Industries, Inc., Chicago, Ill.
 Troy Laundry Co., Port Huron, Mich.
 Tru-Shen Corp., Richmond, Calif.
 Twentieth (XXth) Century Cleaners, Rushville, Ind.
 Twining Laboratories, The, Fresno, Calif.
 Union Bridge Cleaners, Union Bridge, Md.*
 Unique Cleaners, Geneva, Ill.
 United Cleaners, Vicksburg, Miss.
 United Cleaners & Dyers, New Orleans, La.
 United States Testing Co., Inc., Hoboken, N. J.
 Universal Cleansing & Dyeing Co., Cleveland, Ohio.*
 Up-To-Date Cleaners & Tailors, Dansville, N. Y.
 Valetor Cleaners, Everett, Wash.*
 Vermont Cleansing Co., Inc., Burlington, Vt.*
 Vienna Cleaners & Fur Storage, Denver, Colo.*
 Walkers Inc. (Cleaners), Omaha, Nebr.*
 Wapinsky Cleaners, St. Clair, Pa.
 Wardrobe Cleaners, The, Grants Pass, Oreg.*
 Warren Point Cleaners, Fair Lawn, N. J.
 Wausau Laundry & Cleaners Co., Wausau, Wis.*
 Wear, Frank, Cleaners, Yakima, Wash.*
 Webb's Laundry & Cleaning Services, Wilmington, Del.
 Weisbecker Cleaners, Egg Harbor, N. J.
 Wendrow's Wholesale Cleaners, Lansing, Mich.*
 West Cleaning Co., St. Louis, Mo.
 Westbury Valet Co., Inc., Westbury, L. I., N. Y.
 Westside Cleaners, Jackson, Tenn.*
 Whitfield Home Laundry, Inc., Dalton, Ga.
 Whitman's Laundry, Atlanta, Ga.
 Wichita Precision Tool Co., Inc., Wichita, Kans.*
 Williamsburg Restoration Inc., Williamsburg, Va.*
 Wilson Cleaners, Andalusia, Ala.
 Wilson Cleaners, Portales, N. Mex.*
 Winnemucca Laundry & Cleaners, Winnemucca, Nev.
 Yorgey's Cleaners & Dyers, Reading, Pa.
 Your Cleaners, Inc., Gary, Ind.

U. S. GOVERNMENT

U. S. Department of Agriculture, Division of Purchase, Sales and Traffic, Washington, D. C.

*General support.

COMMERCIAL STANDARDS

CS No.

0. Commercial standards and their value to business.
1. Clinical thermometers.
2. Mopsticks.
3. Stoddard solvent.
4. Staple porcelain (all-clay) plumbing fixtures.
5. Pipe nipples; brass, copper, steel and wrought-iron.
6. Wrought-iron pipe nipples. Superseded by CS5.
7. Standard weight malleable iron or steel screwed unions.
8. Gage blanks.
9. Fuilders' template hardware.
10. Brass pipe nipples. Superseded by CS5.
11. Moisture regains of cotton yarns.
12. Fuel oils.
13. Dress patterns.
14. Boys' sport and dress shirt (woven fabrics) size measurements.
15. Men's pajama sizes (made from woven fabrics).
16. Wallpaper.
17. Diamond core drill fittings.
18. Hickory golf shafts.
19. Foundry patterns of wood.
20. Vitreous china plumbing fixtures.
21. Interchangeable ground-glass joints, stopcocks, and stoppers.
22. Builders' hardware (nontemplate).
23. Feldspar.
24. Screw threads and tap-drill sizes.
25. Special screw threads. Superseded by CS24.
26. Aromatic red cedar closet lining.
27. Mirrors.
28. Cotton fabric tents, tarpaulins and covers.
29. Staple seats for water-closet bowls.
30. (Withdrawn.)
31. Wood shingles.
32. Cotton cloth for rubber and pyroxylin coating.
33. Knit underwear (exclusive of rayon).
34. Bag, case, and strap leather.
35. Hardwood plywood.
36. Fourdrinier wire cloth.
37. Steel bone plates and screws.
38. Hospital rubber sheeting.
39. (Withdrawn.)
40. Surgeons' rubber gloves.
41. Surgeons' latex gloves.
42. Structural fiber insulating board.
43. Grading of sulphonated oils.
44. Apple wraps.
45. Douglas fir plywood.
46. Hosiery lengths and sizes.
47. Marking of gold-filled and rolled-gold-plate articles other than watchcases.
48. Domestic burners for Pennsylvania anthracite (underfeed type).
49. Chip board, laminated chip board, and miscellaneous boards for bookbinding purposes.
50. Binders board for bookbinding and other purposes.
51. Marking articles made of silver in combination with gold.
52. Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
53. Colors and finishes for cast stone.
54. Mattresses for hospitals.
55. Mattresses for institutions.
56. Oak flooring.
57. Book cloths, buckrams, and impregnated fabrics for bookbinding purposes except library bindings.
58. Woven elastic fabrics for use in overalls (overall elastic webbing).
59. Textiles—testing and reporting.
60. Hardwood dimension lumber.

CS No.

61. Venetian blinds (grade A, custom-made).
62. Colors for kitchen accessories.
63. Colors for bathroom accessories.
64. Walnut veneers.
65. Methods of analysis and of reporting fiber composition of textile products.
66. Marking of articles made wholly or in part of platinum.
67. Marking articles made of karat gold.
68. Liquid hypochlorite disinfectant, deodorant, and germicide.
69. Pine oil disinfectant.
70. Phenolic disinfectant (emulsifying type) (published with CS71).
71. Phenolic disinfectant (soluble type) (published with CS70).
72. Household insecticide (liquid spray type).
73. Old growth Douglas fir, Sitka spruce, and western hemlock standard stock doors.
74. Solid hardwood wall paneling.
75. Automatic mechanical draft oil burners designed for domestic installations.
76. Hardwood interior trim and molding.
77. Enameled cast-iron plumbing fixtures.
78. Ground-and-polished lenses for sun glasses (published with CS79).
79. Blown, drawn, and dropped lenses for sun glasses (published with CS78).
80. Electric direction signal systems other than semaphore type for commercial and other vehicles subject to special motor vehicle laws (after market).
81. Adverse-weather lamps for vehicles (after market).
82. Inner-controlled spotlamps for vehicles (after market).
83. Clearance, marker, and identification lamps for vehicles (after market).
84. Electric tail lamps for vehicles (after market).
85. Electric license-plate lamps for vehicles (after market).
86. Electric stop lamps for vehicles (after market).
87. Red electric warning lanterns.
88. Liquid burning flares.
89. Hardwood stair treads and risers.
90. Power cranes and shovels.
91. Factory-fitted Douglas fir entrance doors.
92. Cedar, cypress, and redwood tank stock lumber.
93. Portable electric drills (exclusive of high frequency).
94. Calking lead.
95. Lead pipe.
96. Lead traps and bends.
97. Electric supplementary driving and passing lamps for vehicles (after market).
98. Artists' oil paints.
99. Gas floor furnaces—gravity circulating type.
100. Porcelain-enameled steel utensils.
101. Flue-connected oil-burning space heaters equipped with vaporizing pot-type burners.
102. (Reserved for "Diesel and fuel-oil engines.")
103. Rayon jacquard velour (with or without other decorative yarn).
104. Warm-air furnaces equipped with vaporizingtype oil burners.
105. Mineral wool insulation for low temperatures.
106. Boys' pajama sizes (woven fabrics).
107. (Withdrawn.)
108. Treading automobile and truck tires.
109. Solid-fuel-burning forced-air furnaces.

CS No.

110. Tire repairs—vulcanized (passenger, truck, and bus tires).
111. Earthenware (vitreous-glazed) plumbing fixtures.
112. Homogeneous fiber wallboard.
113. Oil-burning floor furnaces equipped with vaporizing pot-type burners.
114. Hospital sheeting for mattress protection.
115. Porcelain-enameled tanks for domestic use.
116. Bituminized-fibre drain and sewer pipe.
117. Mineral wool insulation for heated industrial equipment.
118. Marking of jewelry and novelties of silver.
- (E) 119.¹ Dial indicators (for linear measurements).
120. Standard stock ponderosa pine doors.
121. Women's slip sizes (woven fabrics).
122. Western softwood plywood.
123. Grading of diamond powder.
- (E) 124.¹ Master disks.
125. Prefabricated homes.
126. Tank-mounted air compressors.
127. Self-contained mechanically refrigerated drinking water coolers.
128. Men's sport shirt sizes—woven fabrics (other than those marked with regular neckband sizes).
129. Materials for safety wearing apparel.
130. Color materials for art education in schools.
131. Industrial mineral wool products, all types—testing and reporting.
132. Hardware cloth.
133. Woven wire netting.
134. Cast aluminum cooking utensils (metal composition).
135. Men's shirt sizes (exclusive of work shirts).
136. Blankets for hospitals (wool, and wool and cotton).
137. Size measurements for men's and boys' shorts (woven fabrics).
138. Insect wire screening.
139. Work gloves.
140. Testing and rating convectors.
141. Sine bars, blocks, plates, and fixtures.
142. Automotive lifts.
143. Standard strength and extra strength perforated clay pipe.
144. Formed metal porcelain enameled sanitary ware.
145. Testing and rating hand-fired hot-water supply boilers.
146. Gowns for hospital patients.
147. Colors for molded urea plastics.
148. Men's circular flat- and rib-knit rayon underwear.
149. Utility type house dress sizes.
150. Hot rolled rail steel bars (produced from tee-section rails).

CS No.

151. Body measurements for the sizing of apparel for infants, babies, toddlers, and children (for the knit underwear industry).
152. Copper naphthenate wood-preservative (spray, brush, dip application).
153. Body measurements for the sizing of apparel for girls (for the knit underwear industry).
154. (Reserved for "Wire rope.")
155. Body measurements for the sizing of boys' apparel (knit underwear, shirts, trousers).
156. Colors for polystyrene plastics.
157. Ponderosa pine and sugar pine plywood.
158. Model forms for girls' apparel.
159. Sun glass lenses made of ground and polished plate glass, thereafter thermally curved.
160. Wood-fiber blanket insulation (for building construction).
161. "Standard grade" hot-dipped galvanized ware (coated after fabrication).
162. Tufted bedspreads.
163. Standard stock ponderosa pine windows, sash and screens.
164. (Reserved for "Concrete mixers.")
165. Zinc naphthenate wood-preservative (spray, brush, dip application).
166. Size measurements for men's work trousers.
167. Automotive and general service copper tube.
168. Polystyrene plastic wall tiles, and adhesives for their application.
169. Galvanized ware fabricated from *pre-galvanized* steel sheets.
170. Cotton flour-bag (sack) towels.
171. Hardwood veneered doors.
172. Brass trim for water-closet bowls, tanks, and urinals (dimensional standards).
173. Heavy-duty alpha-cellulose-filled melamine tableware.
174. 140-F dry-cleaning solvent.
175. Circular-knitted gloves and mittens.
176. Prefinished wall panels.
177. Bituminous-coated metal septic tanks (single compartment, residential).
178. Testing and rating ventilating fans (axial and propeller types).
179. Installation of attic ventilation fans in residences.
180. Model forms for boys' apparel.
181. (Reserved.)
182. Latex foam mattresses for hospitals.
183. Boys' trouser size measurements.
184. Steel fence posts—field and line type (produced from hot-rolled steel sections).
185. Wool felt.

NOTICE.—Those interested in commercial standards with a view toward accepting them as a basis of everyday practice may secure copies of the above standards, while the supply lasts, by addressing the Commodity Standards Division, Office of Industry and Commerce, U. S. Department of Commerce, Washington 25, D. C.

¹ Where "(E)" precedes the CS number, it indicates an emergency commercial standard, drafted under war conditions with a view toward early revision.